

**AMENDMENTS TO THE SPECIFICATION:**

At page 1, at line 2, insert the following new paragraph:

**-- CROSS-REFERENCE TO RELATED APPLICATION:**

This application is a Divisional of U.S. Application Serial No. 09/874,737, filed June 5, 2001. --

Please amend the paragraph beginning on page 1, line 17 as follows:

--FIG. 1 is a diagram showing a conventional driver circuit that is capable of varying a drive current of a signal. In the conventional technique, as shown in FIG. 1, ~~either a driver circuit for either a standard A or a driver circuit for a standard B is driven on the basis of, for example, a control signal of "0" or "1," so as to be able to cope with both a case where the electronic device of the opposite party receives a signal of one of two kinds either of the two kinds of drive current defined by the standard and another case where the electronic device of the opposite party receives a signal of the other of the two kinds.~~

Please amend the paragraph beginning on page 2, line 4 as follows:

--In the conventional technique, however, it is necessary to prepare as many driver circuits as the number of kinds of the driver current defined by the standard. As a result, the circuit scale becomes large as the number of kinds of the drive current increases, ~~[[E]]especially in such an electronic device, that where~~ transmission and reception of a plurality of data are performed using one physical layer LSI, it is especially desired to prevent the circuit scale from becoming large.--

Please amend the paragraph beginning on page 2, line 13 as follows:

--Therefore, ~~[[an]]~~ the object of the present invention is to provide a variable drive current driver circuit having a small scale.--

Please amend the paragraph beginning on page 2, line 15 as follows:

--According to [[a]] the first aspect of the present invention, there is provided a variable drive current driver circuit, comprising: a pair of push-pull circuits for driving a load circuit complementarily; a first current source circuit for having a bias current flow into the pair of push pull circuits; and a control circuit for varying both the bias current flowed by the first current source circuit and the bias current flowed by the second current source circuit according to a control signal.--

Please amend the paragraph beginning on page 2, line 23 as follows:

--In the variable drive current driver circuit, the first current source circuit ~~may~~ comprises a current mirror circuit, and the control circuit ~~may~~ controls an input current of the current mirror circuit according to the control signal.--

Please amend the paragraph beginning on page 3, line 3 as follows:

--In the variable drive current driver circuit, the control of the control terminal voltage may be performed by changing, by a transistor which turns on or off according to the control signal, a magnitude of a load ~~in which a current flowing out of a third current source flows~~ which flows through the output--

Please amend the paragraph beginning on page 3, line 10 as follows:

-- In the variable drive current driver circuit, the control of the ~~control terminal voltage~~ second current source circuit may be performed by changing, by a transistor which turns on or off according to the control signal, a magnitude of a load ~~in which a current flowing out of a third current sourcee flows~~ which flows through the output--

Please amend the paragraph beginning on page 6, line 13 as follows:

--In accordance with the present invention, transistors NMOS 13 and NMOS 14 and a control signal input terminal are further added. The logic values of a control corresponds to CMOS levels. According to the logic value, the value of the drive current changes. In a case

where the logic value of the control signal is "1," a current  $I_b$  flows and a voltage  $V_a$  becomes  $V_{a1}$ . On the other hand, in a case where the logic value of the control signal is "0," the current  $I_b$  does not flow and the voltage  $V_a$  becomes  $V_{a2}$ , wherein  $V_{a2} > V_{a1}$ . The currents  $I_c$ ,  $I_{d1}$  and  $I_{d2}$  when the logic value of the control signal is "0" are larger than those when the logic value of the control signal is "1", respectively. As a result, ~~two kinds of drive current according to the control signal can be implemented~~ generate two different drive current(s).--

Please amend the paragraph bridging pages 6 and 7, beginning at page 6, line 26 as follows:

--Comparing FIG. 4 with FIG. 3, it is apparent that the variable drive current driver circuit according to the second embodiment differs from the variable drive current driver circuit according to the first embodiment in that a control circuit, ~~is added to an output stage~~ including transistors PMOS 24, PMOS 25, PMOS 26, NMOS 25, NMOS 26 and NMOS 27, is added to an output stage. In the variable drive current driver circuit according to the first embodiment, the control circuit is added not to the output stage but to the constant current source side. In FIG. 4, the voltage  $V_a$  is constant. In a case where the logic value of the control signal is "1," currents  $I_{c1}$  and  $I_{c2}$  flow. In a case where the logic value of the control signal is "0," currents  $I_{c1}$  and  $I_{c2}$  do not flow. When the logic value of the control signal is "1," therefore, the sum of currents  $I_{c1}$  and  $I_{d1}$  or the sum of currents  $I_{c2}$  and  $I_{d2}$  becomes the drive current. When the logic value of the control signal is "0," only the current  $I_{d1}$  or  $I_{d2}$  becomes the drive current. ~~In the same way~~ as Like the variable drive current driver circuit according to the first embodiment, the variable drive current driver circuit according to the second embodiment has two kinds of drive current controlled by the control signal.

Please amend the paragraph bridging pages 7 and 8, beginning at page 7, line 18 as follows:

--Comparing FIG. 5 with FIG. 3, it is apparent that the variable drive current driver circuit according to the third embodiment is structured by preparing a plurality of sets of the transistors NMOS 13 and NMOS 14 of the variable drive current driver circuit according to the first embodiment and connecting the sets in parallel. Transistors NMOS 131, NMOS 141, NMOS 132, NMOS 142, . . . , NMOS 13N and NMOS 14N correspond to the plurality of sets of the transistors NMOS 13 and NMOS 14. Gates of the transistors NMOS 141, NMOS 142 . . . NMOS 14N are supplied with their respective control signals. Therefore, the variable drive current driver circuit according to the third embodiment can drive its load with a plurality of drive currents. ~~with not only either of drive currents of two kinds but also any of drive currents of many kinds.~~

Please amend the paragraph beginning on page 8, line 3 as follows:

It is a matter of course that, like the circuit of the third embodiment, the variable drive current driver circuit according to the second embodiment can be expanded ~~so as to be capable of corresponding to many kinds of drive current, in the same way as expanding the variable drive current driver circuit according to the first embodiment to obtain the variable drive current driver circuit according to the third embodiment.~~ to enable the circuit to drive its load with a plurality of drive currents. ~~In this case,~~ To expand the circuit of Figure 4, or the second embodiment, a plurality of sets of the transistors PMOS 22, PMOS 23 and NMOS 28 are prepared. The plurality of sets are connected in parallel with the transistor PMOS 24. A plurality of sets of the transistors NMOS 23, NMOS 24 and PMOS 27 are prepared. The plurality of sets are connected in parallel with the transistor NMOS 25.

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